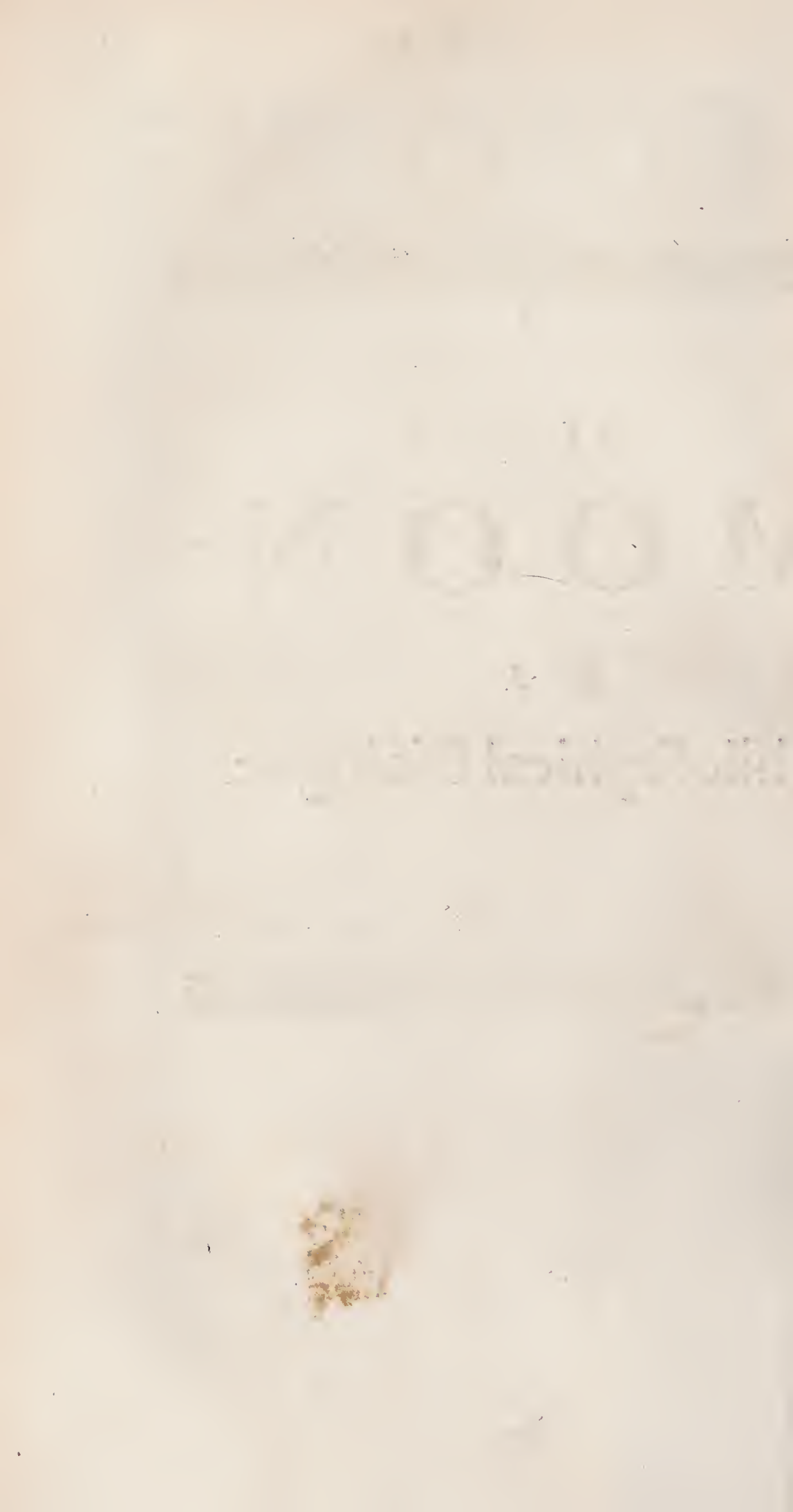


OF THE
MOON:
A
Philosophical Dialogue.



OF THE

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MOON:

A

Philosophical Dialogue.

Ἀπείρηκα γὰρ, ὦ Μένιππε, πολλὰ καὶ Δεινὰ πρὸς
τῶν φιλοσόφων ακούουσα, οἷς οὐδὲν ἕτερόν ἔστιν ἔργον,
ἢ τὰ μὰ πολυπραγμονεῖν. Lucian.



L O N D O N :

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OF THE
MOON:

A

Philosophical Dialogue.

TIMANTHES *to* THEOPHANES.



THE Proof you gave us the other Night, THEOPHANES, of your Veneration for the HOLY SCRIPTURES, and the Way you took to maintain and defend their *sacred Authority* against a *formal* and *vigorous* Attack on the Part of the *New*
B *Philosophy,*

Philosophy, has made so deep and lively Impression on my Mind, that I know not how to enter immediately upon the Narrative I promised you. You will therefore, I hope, excuse me, if, by way of Introduction to my Story, I begin with the Relation of a Debate, in which you bore so great a Part your self; and which you managed with so much Satisfaction to the rest of the Company.

AFTER the usual Compliments; the Conversation, you may remember, shifted from one thing to another; until at last we came accidentally to fall into Discourse about the late great *Eclipse* of the M O O N. Upon which one of the Company said very innocently, That for his part, he happened to be at Home all that Evening; but not thinking of the *Eclipse*, he had indeed observed the M O O N for some time to look duller, and of a more reddish Colour than ordinary; which he ascribed to the then Thickness of the Air; but never suspected that she was then actually under a *Total Eclipse*, till another Person came in; who remembering the Time better, said, That,

if

if the M O O N was really that *gross* and *opaque* Body he had heard many say she was, he could not but strangely wonder from whence all that Light could come ; when as he understood, the E A R T H, which is another *gross* and *opaque* Body too, lay so directly between her and the S U N, that she could not possibly be supplied from him, with any Part thereof.

H E R E, another Gentleman, whom I shall take leave to call L A U R E N T I U S, very smartly interrupted him, and said ; He could not but much more wonder, that any Body at this time of day, could doubt the M O O N's being a *gross* and *opaque* Body : That the Generality of the *Ancients*, from the Consideration of her Monthly *Phases*, had rightly conjectured she has no Light of her own ; but that the *Modern* Discoveries in *Philosophy*, and particularly those made by the *Telescope*, had for many Years past put the matter out of all doubt. That altho' the Interposition of the E A R T H, during the time of the *total Immersion*, does indeed hinder the S U N from shining directly on the Body of the

M O O N; yet nevertheless great Numbers of his *Rays*, might be so *refracted* by the E A R T H'S *Atmosphere*, as to reach her Body at the same time, and thereby make her appear of that ruddy Colour. And in short, that there was good reason to believe, this was indeed the true Cause thereof; because it has been also observed that, according as she happens to be *eclipsed* at a *greater* or *lesser* Distance from the E A R T H, and consequently is capable of receiving a *greater* or *lesser* Portion of this *Refracted Light*, that Colour always appears of a *brighter* or *darker* Form.

T H I S positive Way, I observed, was no ways agreeable to the other Gentleman: And indeed, it put the whole Company into some Confusion, till you, T H E O P H A N E S, vouchsafed to take up the Argument, and relieve us. L A U R E N T I U S, said you, my Friend here, I perceive, has given you a fair Occasion to display your Knowledge in the *Mathematicks*, and in the *New Philosophy*. However, you know, we have a common Saying, *It is not all Gold that glitters*. To trace out the
true

true Causes of any of the *Phænomena* of NATURE, is not perhaps so easy as many are wont to imagine. A *Solution* that may appear very beautiful and ingenious in one *Light*, may put on a quite contrary Aspect in another. Tell me then, LAURENTIUS, have you thoroughly considered this Matter on every Side, and in every Light, that you are so positive, the MOON has no manner of Light of her own ?

NOTHING in Nature, answered he, is more plain and demonstrable.

YOU'LL pardon me, LAURENTIUS, replied you ; if I cannot so readily come into your Opinion. I will explain myself more particularly : Perhaps you may be able to clear up my Doubts. The GUIDES that lead to *true* and *solid Knowledge*, are but few ; I think they may be reduced to *Three* ; SENSE, RATIOCINATION and REVELATION. Whatever clear Discoveries the *last* affords us, I presume, you will allow, ought upon no account to be called in question. But, as for the other *two*, and especially the *second*, I believe

I you

you will also grant they are not always to be depended upon. In *Speculative Mathematicks* indeed, where nothing but *abstract Quantity*, and its *Properties* and *mutual Relations* are considered, it is possible to reason with great Clearness and Certainty. But in Matters of a *Physical* and *Mixt* Nature, the Case for the most part, is much otherwise. This is so obvious, that you will easily allow it needs no Proof. Now, the Difficulty which keeps me from closing not only with your Notion about the M O O N, but even with several other ingenious Notions in the *New Philosophy* is this ; they seem to me to interfere too much with the HOLY SCRIPTURES. For Example, The UNIVERSE, described in *Scripture*, as consisting of many *Parts* or *Members*, all created at one and the same time ; and so ordered and disposed, as to make up but *one entire* and *complete* W O R L D ; your *Modern Philosophers* will have to consist of as many different and distinct *Systems*, as there are *Stars* in the *Heavens* ; and of as many *Worlds* of different Sorts and Ages, as they can fancy *Planets* revolving about them.

them. The same great and magnificent FABRICK, which the *Scriptures* represent as *animated* and *supported* by the Power and Influence of a *spiritual* and *divine Principle* ; and as a Being that has greatly suffered in the *Fashion* thereof by the *Fall* and *Degeneracy* of Mankind ; the *Authors* of your *New Systems* will have to be nothing but a *mere Machine* ; governed and preserved by certain fixed and established *Laws* of *Motion* ; and little or no ways concerned or interested in the Fate and Fortunes of the Sons of ADAM. That glorious LUMINARY, in whom the Great AUTHOR of NATURE is said to have pitched his Tent, and in and through whom He governs the *Natural World*, and dispenses his *Influences* as He sees fit : They that pretend to the *latest* and *best Discoveries*, will have to differ in nothing from the most *stupid* and *lumpish Mass* of *Matter* on *Earth*, save only in *Bulk* and in the *Texture* and *Intestine Motion* of its Parts. His PARAMOUR described in *Scripture*, as the *Beauty of Heaven*, the *Glory of the Stars*, and a great LUMINARY, the same Gentlemen will have to be nothing but a

Dense

Dense and Opake Globe of mere common Matter ; one of the meanest and most insignificant of all the Heavenly Bodies ; and on no account worthy of the least of those illustrious Epithets.

HERE then, lies the great Difficulty, LAURENTIUS ; the *sacred Writings* represent the *Nature and Extent* of the *Creation*, and the *Designs and Purposes* of GOD therein, one way ; and the Books of *Modern Philosophers*, another. As to the Point now in debate ; the *former* represent the MOON as a *great and glorious LUMINARY* ; the *latter*, as a *mere gross and opake Body*. The Question then is, Which am I to be governed by in such a Case ; by *Divine* or *Humane* Authority ? By the bright and heavenly Light of *Truth*, shining pure and without any Mixture of Error in the *Holy Scriptures* ; or by such other Lights as are only grounded on the *imperfect* Representations of *Sense*, or the *slippery* Inferences and Conclusions we are apt to draw from them ? I am persuaded, LAURENTIUS, you will hardly advise me to part with a *Certainty* for an
Uncertainty

Uncertainty ; to sacrifice a *stronger* to a *weaker* Evidence ; to leave an *infallible* Guide, for one, which you must confess, may *possibly* mislead me.

AT these Words, you may remember, LAURENTIUS put on a very grave Air ; then after a short Pause ; No ! no ! THEOPHANES, said he, I shall never persuade you to part with any thing upon such unequal Terms. The *Advocates* for the *New Discoveries* have no occasion to carry matters to that Extremity. True it is, in the *New Philosophy*, there are many things, which can scarce, if at all, be reconciled to the Letter of the *Holy Text*. But then we are to consider, that in relation to such matters, the *Scriptures* were not penned with a strict regard to *Philosophical Truth* ; but rather suited to the Capacity of the *Vulgar*, and the *common Notions* and *Opinions* of Mankind ; not with design to teach us the *true System* of *Nature*, but only G O D's *true Religion*, and the *Ways* and *Means* that lead to *eternal Happiness*. The *Scriptures*, 'tis true, call the M O O N a *great Light* ; yea, further ;

C

ther ; They likewise describe her as the next in *Rank* and *Dignity* to the SUN. But yet for all this, who does not know that in reality she is the least of all the *Planets* ? And consequently that herein the HOLY GHOST must be understood to accommodate himself to the *common* Notions of the *Vulgar* ; who, because the MOON appears to them next in Magnitude to the SUN, think she really is so. If the MOON then, according to the *Scriptures*, be ranked next the SUN ; not that she is in reality next him in *Magnitude*, but only because she seems to us to be so ; why may she not as well be said to be a *great Light* ; not that she has really any Light of *her own*, but only because she appears to us as if she had ? If this be the right way of explaining the Text, you will at the same time perceive that your Objection is fully answered. But if nothing will content you, but a strict Adherence to the Letter in all Cases ; it will then lie upon you to shew how the MOON, which we are certain is the *least* of all the *Planets*, can be called by way of Eminence, a *great Light* ; or with what Propriety she can

can have the *second* Place assigned her, in a *true* and *Philosophical* Account of the Creation? To be free with you, THEOPHANES, I think it were much to be wished we could all be brought to believe, that the *Scriptures* were never intended as a *Rule* for us to go by in *Philosophy*. Sure I am, nothing could contribute more to strengthen their *sacred* Authority ; especially with the *more learned* and *inquisitive* Part of the World.

I AM heartily glad, replied you, that you are so just to the *Holy Scriptures*, as to allow them their *due* Authority in Matters of *Faith* and *Religion*. It were greatly to be wished all the *new* Philosophers were as sincerely of your Mind in this, as you seem to be of theirs in all other Points. But if I may have the Liberty of saying so, the just Regard and Concern you express for the *Scriptures*, I take to be more the Result of a generous and upright Heart, than a just Inference in your Way of thinking. For, if it should be once allowed that GOD may dispense with the Truth in *some* Cases ; than why not in *others* ? If out of

Compassion to the Weakness of our natural Faculties, he may be allowed to have condescended to represent any of the Objects of *Sense* to us otherwise than they really are in themselves; why may he not much more be supposed to have taken the same Method in Relation to *spirituals*, where our Faculties at present are still weaker, and far more unable to conceive aright of such Objects? And if so; what Use would the *Scriptures* be of afterwards? What Authority, think you, would the *more learned* and *inquisitive* Part of the World allow them, even in Matters of *Faith* and *Religion*? Less by much, I doubt, than even you your self would be willing they should.

THE *Scriptures*, you say, were penned not with Design to teach us the *true System* of *Nature*, but only GOD's *true Religion*. I agree with you, that the *first* and *principal* Design of the *Scriptures* is to instruct us in the Principles of *true Religion*. But must it therefore follow that the *sacred Writers*, as often as they treat of *Nature* and *natural* Things, were at Liberty to
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suit and accommodate themselves to the *common* and *mistaken* Notions of the *Vulgar*? No, LAURENTIUS, either I am greatly mistaken; or such a Notion is utterly inconsistent with the whole *Scope* and *Tenor* of the *Scriptures*. They were given to teach us the Way to *true* Happiness: For this End they contain many *excellent* and *divine* *Laws* and *Precepts*. To enforce our Obedience to such *Laws* and *Precepts*, they assure us, That, as GOD the AUTHOR of them, is the CREATOR and LORD of all things, and *sees* and *knows* all the *Actions* and *Imaginations* of Men, so he is a *Rewarder* of those that truly *love* and *obey* him, and will also severely *punish* all such as shall presume to transgress any of them. And to enforce our Obedience to them in the *strongest* *Manner*, they further shew, not only that the DIVINE POWER has often miraculously interposed for the *Preservation* of the *Righteous*, and for the *Punishment* of the *Wicked*; but that the *Frame* and *Constitution* even of the *natural World*, and of all the *Elements* is such, That at his Command they are always ready to *increase*

crease their Strength against the unrighteous for their Punishment, and to abate their Strength for the Benefit of such as put their Trust in him. This, as I take it, is the *Design* ; and this the *Philosophy* of the *Scriptures* ; A *Design* truly worthy of the most high GOD, and of the highest Concern to Mankind ; a *Philosophy* revealed by the AUTHOR of NATURE himself, and confirmed by innumerable *Signs* and *Wonders* ; a *Philosophy* from which *the invisible things of GOD are clearly seen and understood, even his ETERNAL POWER and ALL-RULING PROVIDENCE* ; A *Philosophy* so divine, so opposite to the *common* and *mistaken* Notions of the *Vulgar*, that I am sorry to say it, I know but few of the more *learned* and *inquisitive* Part of the World, that seem to have any *Idea* of it.

THE Time would fail me, continued you, to shew the Vanity of this prevailing Notion, That the *Scriptures* were not penned with a strict Regard to *Philosophical Truth*, at full Length, and in its proper Colours. I shall therefore keep to the
single

single Point in hand. The *Scriptures* call the MOON a *great Light* ; To which you add, that they likewise assign her the *second Place* in the *Mosaic Account* of the *Creation*. Very true ; they do. Oh ! but we know for certain, say you, That this must be understood as to Appearance only ; because it is now allowed on all hands, That she is really the least of all the *Planets*. Suppose that too, if you please ; what is that to the Point in question ? Do the *Scriptures* any where say that she is greater in *Magnitude* than *Saturn*, or *Jupiter*, or *Mars*, or even than *Venus* or *Mercury* ? If they do, quote the Chapter and Verse, and I shall freely own my self at a Loss for an Answer. What ! Can this Pre-eminence of the MOON be grounded on nothing but *Bulk* and *Magnitude* ? Can any thing be more *gross* or *vulgar* than such a Notion ? Is it not a common Saying, *tanta est rei præcellentia, quanta est ejus ætîvitas* ? May not the Word *great* then import great in *Light*, great in *Vertue*, great in *Power* ? And does not this Glorious LUMINARY afford more *Light* to Mankind than all the *Stars* and all the
other

other *Planets* together? Is not her *Power* and *Vertue* over all earthly things far *greater*, much more conspicuous and incontestible than that of the *bulkiest Planet* in the Heavens, the bright LUMINARY that rules the Day only excepted? May not the MOON then, tho' as to *Bulk*, the *least* of all the *Planets*, yet on these Accounts justly claim the Honour of being ranked next the chiefest of them? Nay, have not some of the best Philosophers recognized her Right to this high Privilege, in as full and ample a Manner as the *sacred Writers* themselves? Consult the *Platonists*, if you please; The *Planets*, they will tell you, are not all endued with the same *Power*; The SUN is their *Captain* and *Chief*; Next the MOON, which ἐννα & δυνάμεις, that is, *by Reason of her Power and Virtue*, obtains the *second Place*; and then the Rest of the *Planets* every one according to its Nature.

THE ancient *Egyptians*, whom *Macrobius*, as I remember, styles the Parents of all the Branches of *Philosophy*, compared the SUN to a *King*; the MOON to a *Queen*;

Queen; and the other *five Planets* to their *Great Officers* and *Attendants*. The same People, as another great *Historian* and *Philosopher* observes, believing that, in her Body as in a *Womb*, the several *prolific Influences* of all the Rest of the *Stars* and *Planets* are first prepared and ripened, and that from thence they are dispensed at proper *Times* and *Seasons*, and communicated to the respective Individuals here below, in order to enable them to increase and multiply every one after its kind, called her *The Mother of the World*. Another Writer of the first Rank for *Wit* and *Eloquence*; one who had made the *secret Philosophy* of the *Ancients* his darling Study, makes *ISIS* or the *MOON* speak to this Effect; “ I am *Nature*, the *Mother* of all things, the *Mistress* of the Elements, The *Initial Off-spring* of Ages, The *Chiefest* of the *Divine Powers*, The *Queen* of the *Manes*, The *first* of the *Celestial Natures*, The *Uniform Face* of all the *GODS* and *GODDESSES*. I govern the luminous Heights of *Heaven*, The salutary *Motions* of the *Sea*, The *Shades* that dwell in mournful Silence.

D

“ lence. I am that *Deity* of various
 “ Form, which under different Names, and
 “ with different Ceremonies, the whole
 “ World adores : The *Phrygians* call me
 “ *Cybele*, the *Mother* of the *G O D S* ; The
 “ *Athenians*, *Minerva* ; The *Papheans*,
 “ *Venus* ; The *Cretans*, *Diana Dyc̃tinna* ;
 “ The *Sicilians*, *Proserpine* ; The *Eleu-*
 “ *sinians*, *Ceres* ; some, *Juno* ; others,
 “ *Bellona* ; many, *Hecate* ; some also call
 “ me *Rhamnusia* ; The *Ethopians* that
 “ border on the rising Sun, and the *Egy-*
 “ *ptians* who excel in *ancient Doctrine*,
 “ Honour me with proper Ceremonies,
 “ and call me by my right Name, *ISIS*
 “ the *QUEEN*.

BUT hold ! What Occasion have we to
 go abroad for *Witnesses* to prove the su-
 perior *Power* and *Dignity* of the two
 great *LUMINARIES* of Heaven, when
 the *sacred Writers* themselves speak so
 plain and home to the Purpose. Does not
 the *divine* Writer of the History of the
 Creation, open their Commission in as full
 and ample Terms as possible ? “ And God
 “ made two great *LIGHTS*, the greater
LIGHT

“ LIGHT to *rule* the Day, and the lesser
 “ LIGHT to *rule* the Night : And GOD
 “ set them in the Firmament of Heaven,
 “ to give Light upon the Earth, and to
 “ *rule* over the Day and over the Night.
 And is not the Word in the *Original*,
 which we translate *rule*, derived from a
 Root equivalent to βασιλεύω in the *Greek* ;
 and to *regno, impero, sum Rex vel Regi-*
na in the *Latin* ? Does not the *Prophet*
 that was sanctified from the Womb to be
 a *Prophet* unto the Nations, at the same
 time that he expostulates with his Brethren,
 and condemns their *burning Incense* to the
 MOON, give her the Title of QUEEN of
Heaven ? Does he find any Fault with
 them, or with the *Egyptians* among whom
 they sojourned, for calling her by that *august*
 Name ? Nay rather, does he not thereby
 expressly own and recognize her *Right*
 and *Title* to it himself ? And is not the on-
 ly Fault he accuses them of, their *burning*
Incense to her, and by that means paying
 her a part of that *Worship* and *Adoration*,
 which is due only to him, from and under
 whom she holds and enjoys that *high* and
honourable Station ?

WHAT can more *clearly* or *emphatically* express the *supreme Power* and *Jurisdiction*, as I may say, of the SUN and MOON in the *natural World*, than to call them the $\pi\rho\upsilon\tau\acute{\alpha}\nu\epsilon\iota\varsigma\ \kappa\acute{o}\sigma\mu\varsigma$, as the Author of the Book of *Wisdom* does? Is it not well known that the Word $\pi\rho\acute{\upsilon}\tau\alpha\nu\epsilon\iota\varsigma$ was peculiarly appropriated at *Athens*, *Rhodes*, *Smyrna*, and many other famous Cities of *Greece* and *Asia*, to those Magistrates who bore the *supreme Rule* in the Commonwealth ; and to whose more immediate Care and Inspection, the *sacred Fire* dedicated to *Vesta*, and the Revenue for the Support of those that had merited well of their Country, were committed? Does not *Suidas* and *Hesychius* render the Word by $\beta\alpha\sigma\iota\lambda\epsilon\upsilon\varsigma$, $\alpha\rho\chi\omega\nu$, $\tau\alpha\mu\acute{\iota}\alpha\varsigma$, $\chi\omicron\rho\eta\gamma\acute{o}\varsigma$? From all which is it not manifest, that the Author of that Book looked upon them as the *Heads* and *Leaders* of the *Celestial Choir*? As the *first* and *chiefest* of the governing Powers of Nature? Nay, to enable them to execute this *high Office*, does he not acknowledge such *Power* and *Vertue* in them, as astonished all their Beholders,

ders, and which dazled their Eyes to that Degree that they fell down and worshipped, and paid divine Honours unto them? Does he not expressly own that they are *beautiful*, and *powerful*, and endued with *singular Vertue*, and thereupon found his Argument, and shew the true Use the Nations ought to have made of such a Piece of Knowledge? “ If they being delighted
 “ with their *Beauty*, says he, took them
 “ to be GODS; let them know how much
 “ better the LORD of them is; for the
 “ FIRST AUTHOR of *Beauty* hath created them: But if they were *astonished* at
 “ their *Power* and *Vertue*, let them understand by them, how much *mightier*
 “ he is that made them: for *by the Greatness and Beauty of the Creatures, proportionably the Maker of them is seen.*

ONCE more: What think you of the glorious *Evidence* of *Jesus* the Son of *Sirach*? Does he not describe the SUN as a *marvellous Vessel* or *Instrument*? As a *Creature* full of the *Glory* of the LORD? As the *first* in *Dignity* and the most wonderful of all the heavenly Bodies? Does he

he not, next to the SUN, introduce the MOON, as the *Beauty* of Heaven, the *Glory* of the Stars, an *Ornament* giving Light in the highest Places of the LORD ? Does he not describe her as an *Instrument* or *Vessel* of the Armies above, or according to the *Arabic Version*, as the *Light of all Creatures*, shining in the Firmament of Heaven ?

IN good earnest, LAURENTIUS ; when I consider the *Number* and *Weight* and *Harmony* of these and the like *Testimonies*, I take it to be such an Argument for the superiour *Power* and *Dignity* of the MOON, as well as of the SUN, above all the Rest of the *celestial* Bodies, that I must see stronger Reasons than any you have alledged as yet, before you will be able to persuade me that she is nothing but a great *Mass* of *common Matter* ; a Body wholly void of all *Light* and *Vertue* of her own, as you seem to imagine.

ALL this while, your Eyes were so fixed upon LAURENTIUS, That I believe you scarce allowed your self Time to
mind

mind the Pleasure and Satisfaction your Discourse gave the rest of the Company. The good old Gentleman, who at first setting out, thought himself not so civilly used, seemed more particularly pleased with it. THEOPHANES, said he, I must crave leave to put in a Word here. What I said was without any Design to engage you or any of the Company in a Controversy. That Gentleman, looking to LAURENTIUS, was the first that took up Arms; and now, after what you have said, I think he cannot do better than to be the first to lay them down again.

HOLD there, answered LAURENTIUS with an Air, as if he thought his Honour now at Stake. Believe me, I shall not give up the Point so readily as you imagine: I see we must take another Way. Then addressing himself to you; I presume, THEOPHANES, said he, you will allow that the MOON is a Body and an Object of *Sense*; and that therefore, whatever Informations we receive this Way concerning her *Nature*, may be safely relied upon. Suppose then, it could be made appear by the
I undoubted

undoubted *Testimony* of *Sense*, That the M O O N has no *Light* of her own, and that *she* is indeed nothing but a great Body of *common, gross, and opake* Matter. What will become of all your *ancient Testimonies* then, think you? What must be said to all your *Scripture Proofs*, which seem to imply the contrary?

W H Y, said you, the Consequence is obvious: If you can do that, I shall readily allow all that I have said to go for nothing.

I A M content then, said he, to put the Matter wholly upon that Issue.

A N D I as readily accept the Terms, reply'd you smiling; provided you insist upon nothing but *Matter of Fact*, and *strict Demonstration*.

I P R E S U M E then, said L A U R E N T I U S, you will allow this to be *Matter of Fact*; That, from the *Change* to the *Full*, the M O O N gradually *increases* in Light; and contrariwise, that, from the *Full* to the *Change*,

Change, she gradually decreases again. You will likewise admit that, in all Places of her *Orbit* and at all times, she turns one and the same *Face* or *Hemisphere* to the Earth ; and that she *increases* and *decreases* in *Light*, exactly in Proportion as that *Hemisphere* comes to be more or or less exposed to the *direct* Rays of the SUN.

ALL this I readily grant, said you ; But what do you infer from thence ?

ONLY this, answered he ; That the MOON is really a *dense* and *opaque* Body and that what we call her *Light* is in reality nothing but a *borrowed Light* ; or, to speak more properly, the *reflected Light* of the SUN. A Proof, which in my Opinion, comes nothing short of *strict Demonstration*.

NOT so positive, LAURENTIUS, replied you. That the Light of the MOON as to us, *changes* and *increases* and *decreases*, according to her *Position* to the SUN, was a *Phænomenon* as well known to *Moses*
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and the *Ancients*, as to any of us. But yet, for all that, we do not find they thought she had less *Power*, or that she was nothing but a *huge Lump*, or *Mass* of mere *dense, opaque* and *unactive Matter*. This is a shrewd Sign, your *Demonstration* is not so compleat and cogent as you imagine. And if you will have a little *Patience*, possibly I may be able to shew, that in Truth there is no Stress at all to be laid upon it.

I THINK I may upon good Grounds venture to say, That there is not any kind or sort of Body in Nature, but what is endued with some Portion, more or less, of *innate Light*. A very learned and eminent *Physician*, many Years since, wrote a Treatise on purpose to shew that all *living Creatures*, and even all *Plants, Stones, and Metals*, have each a certain Portion of *innate Light* in them. And the *late Experiments*, which several worthy and ingenious Members of the *Royal Society* have made upon *Mercury, Glass, Amber, Oyster Shells, woollen Cloaths*, and several other coarse Substances, all
which

which upon *Tryals* duly made, are found to yield a sensible Light, clearly demonstrate that there is no earthly thing, how gross or unpromising soever, but what may be made do the same. Let me ask you then, LAURENTIUS, if this be the Case, as to all *Terrestrial* Bodies, what shall we think of those that are placed in the *Regions of Light* itself? If the *former* are each endued with a Portion, more or less, of *native* Light, can we in Reason deny the same Privilege to those, which seem to be infinitely better qualified, not to say made on Purpose to partake of, and to dispense the same to others?

GRANT there may be some small Portion of *latent* Light in the MOON, as well as in all other *dense* and *opaque* Bodies, replied LAURENTIUS, yet what is that to our Point? In the Experiments you mention, The *latent* Light never shews itself, until the Bodies be either put into *violent Motion*, or else very briskly *rubb'd* against one another; and not then neither but in a *dark* Room. But nothing of this kind can be practised upon the Body of the

MOON: Or, if it could, the *Light* she would give that Way, in all Probability would be but very *inconsiderable*.

THERE are several things in Nature, said you, whose *innate* and *latent* Light may be excited and awakened without the Help of *Attrition* or a *dark* Room. About *Babylon*, there is a sort of fat Clay or Slime, called *Naphtha*, which, as *Plutarch* and *Strabo* relate, a Fire or Candle at some considerable Distance will set on *Fire*; and which will thereupon burn so vigorously, as to put all the intermediate Air too into a Flame. *Pliny* describes a *Herb*, whose Root would take Fire at a Distance like *Naphtha*. Near *Grenoble* in *France*, There is, as *Gassendus* reports, an *ardent Fountain*, which, if touched with a lighted *Torch*, will take Fire, and continue burning for many Days together. Not far from *Wigan* in *Lancashire*, there is a noted *Well*, from the Bottom whereof, as Mr. *Shirley* and Dr. *Leigh* observe, There arises a Steam of so subtile and inflammable a Nature, that the Flame of a Candle held over the Surface of the Water, will set it

on Fire, and make it give a very *bright* and *vigorous* Flame. To come yet nearer to the Point. *Kepler* informs us, That some *Chymists* in his Time, had a way of making certain *artificial Gems*, which by being exposed only to the Light of the Day, would *burn* like a *Candle*. The *Property* of the *Bolonian Stone* is sufficiently known, which if exposed to the SUN, and afterwards carried into any dark Place, will give a *sensible* Light for some time. A learned *German Physician*, sent a Present of a *factitious Paste* to King CHARLES the *Second*, and to the *Royal Society*, which, upon being exposed a little while only to the *Day* or *Candle* Light, would afterwards shine in the dark like a *glowing Coal*; between which *Paste* and the *Bolonian Stone* there was this Difference, that the *Stone* requires the SUN-Beams to invigorate it; but the *Paste* needed no shining SUN; but did the same in quite over-cast Weather, and even in a misty Day. The truly Honourable Mr. *Boyle* has a Preparation of his own, Which he calls his *Aereal Noctiluca*, or *shining Liquor*, which by being only exposed

posed to the bare *Contact* of the *Air*, without any external *Illustration* or *Heat*, would immediately produce a *Light* that might be made to last a good while. The same *excellent* Person assures us further that, he knew a Body *dry* and *solid* enough to be pulverable, that barely by the *Contact* of the *common Air*, would, even when it was actually Cold, in a very few Minutes have its Parts brought to such a Degree of Agitation, that its Heat was little less intense, than that of some actually *ignited* Bodies, and might by the further Action of the *Air*, be brought to afford some *Light* also. And to give you but one Instance more of this Kind; a late worthy Member of the *Royal Academy of Sciences*, has taught us how to make a new Kind of *Phosphorus*, of a very unpromising Kind of *Stuff*, which yet, being only exposed to the *open Air* by *Day* or *Night*, not only takes *Fire* of itself in a Minute or two, but even burns with such Violence as to consume any *combustible* Matter that comes near it.

IF the Flame of a *Candle* then, continued you; can light a *terrestrial* Vapour;

if the SUN shining so little a while upon a *Stone* or other *artificial* Composition; nay, if the being only exposed to the *bare Action* of the *common Air*, can so excite the *latent luminous Vertue* of many Bodies here below, as to make them shine and give a *considerable Light*, and produce other *strange Effects*; if this, I say, be *Matter of Fact* with us here on Earth; and *Matter of Fact* it certainly is; Then what should hinder but that the Nature of that *celestial Phosphorus*, the MOON, may be such, that *she* only wants the Concurrence of the *Solar Vertue*, to excite and exalt her own *native Light*; and thereby render it more *useful, conspicuous, and efficacious* to us at this Distance from her? May not all that *Variety* of *Appearances*, which *she* puts on every Month, be better accounted for this Way, than the other? And if so; pray tell me, what will become of your *boasted Demonstration* then?

THIS, answered LAURENTIUS, I will be bold to say, is nothing but *mere Conjecture*. And if you ever viewed the
MOON

M O O N with a *Telescope*, you must allow there can be no Foundation for it. By the Help of a good Glass, you may plainly perceive that, she is in all Respects just such another *gross, opaque, rugged, and uneven* Body as this our Earth; That there are *large Tracts* in her, which *reflect* the Light more strongly, and must therefore be *dry Land*; that there are others interspersed up and down, which *reflect* the same much more faintly, and therefore must be *Water* or *Seas*; That the *dry Land* is distinguished into *huge Mountains* and *large spacious Plains*; and that the *Seas* are adorned with an infinite Number of *Islands* of various Shapes and Sizes. All which is further confirmed from that Remark lately made by a *Reverend and Curious* Observer, That when the *Limit* of *Light* and *Darkness* passes over the *brighter* Parts, it plainly appears jagged and uneven; but strait and even when it passes over the *darker*: Which evidently demonstrates the one to be *mountainous* and *dry* like *Land*; and the other, *smooth* and *level*, like the *Ocean*.

THAT

THAT the MOON viewed through a good *Telescope*, appears strangely and most beautifully variegated, is very true, replied you. But, I confess, I am at a loss to see, wherein this contradicts any thing that I have said; or how it proves that she is really nothing but a *mere dark and opaque* Body. On the other hand, as a corroborating Proof of what I have already advanced; I think, I may further add that, for some Days both before and after the greatest Part of that Hemisphere which respects us, can receive any Light from the SUN, we may plainly see her whole Body, and even those Parts too, which you call her *Spots*; which, as I conceive, is a shrewd Sign, not only that she is not a *mere dark and opaque* Body, but that she must be *Mistress* of no inconsiderable a Share of Light of her own.

OH, said LAURENTIUS interrupting you; that *Secondary Light*, is easily accounted for: In Effect, it is nothing but the Light of the SUN, first reflected from the EARTH to the MOON, and then from her back again to the Eye of the

F Spectator;

Spectator; and that in such Abundance, as to enable us to see those Parts of her Body, which otherwise would not be visible at all, at such Times. And hence it is, that the nearer the M O O N is to the S U N, the more *brisk* and *lively* this *Secondary Light* always is; because the nearer she is to him, the more is the enlightned *Hemisphere* of the E A R T H turned towards her, and consequently the more Light do those *otherwise* dark Parts receive by *Reflexion* from thence.

T H I S indeed was *Mesthlin's* Opinion, answered you; And as it seemed to carry a little more Probability with it than that of the celebrated *Tycho*, who thought this Light came from *Venus*, it has had the good Fortune to pass the more currently ever since. But I had something more to offer, which I am apt to believe you will not find so easy to elude. During the Time of the *Total Eclipse* of the S U N, which happened in *May 1706*, and which was *central* at *Montpellier* and *Marseilles*, the *Mathematicians* of those Places observed, that the Body of the M O O N was encom-
passed

passed with a large *Circle* or *Ring of Light*, of a very white Colour, concentric with the M O O N, and about a Digit in Breadth ; that within those *Limits*, the Light preserved an equal *Vivacity* ; but that changing afterwards, and growing still weaker and weaker, it formed about the M O O N a *circular* and *luminous* Space of about eight Degrees *Diameter*. And in the last *Total Eclipse* of the S U N, which happened at *London*, the 22d of *April* 1715. one of our ablest *Astronomers* assures us, “ That a few Seconds before the S U N was
“ all hid, there discovered itself round the
“ M O O N a *luminous Ring*, about a Digit
“ or perhaps the tenth Part of the M O O N’s
“ Diameter in Breadth ; that it was of a
“ pale Whiteness, or rather Pearl Colour,
“ seeming to him a little tinged with the
“ Colours of the *Iris*, and to be *concen-*
“ *tric* with the M O O N. That whatever
“ it was, this *Ring* appeared much *brigh-*
“ *ter* and *whiter* near the Body of the
“ M O O N, than at a Distance from it ; that
“ its outward Circumference, which was
“ ill defined, seem’d terminated only by
“ the extreme Rarity of the *Medium* it

“ was compos’d of, and in all Respects
 “ resembled the Appearance of an *enlight-*
 “ *ned Hemisphere* viewed from far ; that
 “ during the Time of the *Total Eclipse*
 “ he kept his Telescope constantly fixed
 “ on the M O O N, in order to observe
 “ what might occur in so uncommon an
 “ Appearance ; that he found there were
 “ perpetual *Flashes* or *Corruscations* of
 “ Light, which seem’d for a Moment to
 “ dart out from *behind* the M O O N, now
 “ *here*, now *there*, on all *Sides* ; but more
 “ especially on the *western Side*, a little
 “ before the *Emersion* ; and that about
 “ two or three Seconds before it, on the
 “ same *western Side*, where the S U N was
 “ just coming out, a long and very narrow
 “ *Streak* of a dusky but strong *red* Light,
 “ seem’d to colour the dark Edge of the
 “ M O O N, tho’ nothing like it had been
 “ seen immediately after the *Immersion* ;
 “ But that this instantly vanished upon
 “ the first Appearance of the S U N, as did
 “ also the aforefaid *luminous Ring*.” An-
 other ingenious Gentleman, who came over
 from *Paris* on Purpose to see the same
Eclipse, gives much the same Account of
 those

those *luminous* Appearances ; with this Difference only, that whereas Dr. *Halley* observed the *Flashes* of Light now *here*, now *there*, on all *Sides*, but more especially on the *western* Side, a little before the *Emersion* ; the Chevalier *de Louville* says, that he observed them, some times in one Place, and sometimes in another, but more especially towards the *eastern* or *immerging* Side, From all which it would seem, That the *one* had directed his Eye more to the *western Limb*, and the *other* more to the *eastern* ; and that upon the whole, those *Flashes* and *Corruscations* of Light were very numerous and conspicuous all over her Body. And this puts me in mind of a Passage I have met with in another Author, who from some Observations of his own on the MOON at the *Full*, writes that, he had often seen her *Edges*, and indeed her whole enlightened *Disk* to *undulate* and *rise*, like the *Flame* of a *burning Furnace* ; so that you would swear it could proceed from nothing but her being *accended* by some *mighty Fire* within herself.

GIVE me leave now, LAURENTIUS, to reason with you a little upon these *Phænomena*. Will you say with Monf. *Cassini*, That the SUN himself is always furrounded with a sort of a *luminous Border*, or *Atmosphere* ; and that upon his being intirely hid himself from our Sight by the Body of the MOON, that *Border* or *Atmosphere* discovers itself all around *her*, in the Form of this *luminous Ring* ? In Answer to this, it may suffice to say, that, it having been observed that, from the *Beginning* to the *End* of the *Total Immersion*, this *Ring* is always exactly *concentric* with the MOON herself, and not with the SUN ; *Others* have rightly judged that the *Light* thereof must proceed from *her* and not from *him*.

FROM the *Flashes* and *Corruscations* of *Light* that were seen all over the *dark Side* of the MOON, will you conclude with the *Chevalier de Louville*, That it must then have *thundered* and *lightned* there ; and consequently that the MOON must necessarily have an *Atmosphere*, and that this
luminous

luminous Ring was nothing but the *Light* of the *SUN* *refracted* through the same? This perhaps might have done some Service, had not Messieurs *Cassini*, *Maraldi*, *De la Hire*, and others, demonstrated over and over, That the the *MOON* has no *sensible Atmosphere* at all.

WILL you suppose with *Monf. de Lisle*, That a sufficient Quantity of the *SUN's* Rays may be so *inflected* in their Passage by the *Edges* of the *MOON*, as to reach the Eye, and thereby cause this *luminous Appearance*? If this were the Case, something like it, must one Time or other have happened to *Jupiter* and *Venus*; which yet are always observed to pass by the *MOON* without any Let or Molestation of this Nature whatsoever.

WILL you suppose with *Monf. De la Hire*, the Edge of the *MOON's Disk* to be very *rugged* and *uneven*, and thereby capable of *reflecting* such a Number of the *SUN's* Rays as to produce this *luminous Ring*? But, is it possible for any *opaque Globe*, placed directly between the *lumi-*
nous

nous Object and the *Eye*, as in this Case, to *reflect* any Light at all, so as to reach an *Eye* placed within the *Cone* of its own *Shadow* ? I confess, I am so dull as not to be able to see how this can possibly be.

UPON the whole then, if neither *Reflexion*, nor *Refraction*, nor yet *Inflexion*, can be allowed to have any Part in the Production of this *Phænomenon* ; What hinders but that, from those *Flashes* and *Corruscations* of *Light*, which were so observable all over the dark Side of the M O O N at that Time, we may fairly conclude, *she* has really and at all times a *Principle* of *Light* in *herself*; and that the *luminous Ring* which appeared round about her, during the whole Time of the *total Immersion*, was nothing but the *Light* of her extreme Parts, equally *awakened* and *accended* all around by the SUN, in the Manner I just now mentioned ?

WHAT think you of this, LAURENTIUS, continued you ; Does the *Seas* and *Mountains* which you fancy you have seen in the M O O N, still stick with you ? Let us consider

consider them next, if you please. Methinks the vast Height you allow to your *lunar Mountains* is somewhat shocking: The EARTH is about sixty times bigger than the MOON, and yet some of her *Mountains* are computed to be *thrice* as high as the highest of *ours*; which in my Opinion is not very likely; especially if there was that *Analogy* between *her* and the EARTH in so many other Respects as you imagine. But tell me, I beseech you; How do you know that there are any *Mountains* at all in the MOON? I know you'll say, there are some *Parts* or *bright Spots*, which may be seen some Time before they come within the *Limits* of the *illuminated Disk*. Grant it, and what follows? That they must be the *Tops* of *Mountains*, or *Parts* lifted up above the Rest of the Surface, otherwise they could not be seen so soon? This, with great Submission, I think is begging the Question; it is founded upon a *Supposition* not yet *demonstrated*, namely, That the MOON is nothing but a *mere dark and opaque Body*, and that all the *Light* she gives proceeds wholly from *Reflexion*. But, pray, consider;

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may not the Body of the M O O N be composed of such *Parts*, that *some* may take the *solar Influence* much easier and quicker than *others*? May there not be such *secret Communications*, That the *quickenning Vertue* may be conveyed from the *enlightned Hemisphere* to many of the neighbouring *Parts*, some Time before they come actually under the *Influence* of his direct Rays? May it not so happen, that those *Parts*, which you fancy to be the *Tops of Mountains*, for no other Reason, but because upon your *Hypothesis*, you can no other-wise Account for their being seen so soon, may be *accended* and *enlightened* this Way? Nay, there being so many of those *bright Spots* to be seen, almost at all times, bordering on the *Limit of Light and Darkness*, is it not most probable that they are such as have a *freer* Communication with the *illuminated* *Parts*, and are better disposed to receive the *solar Influence*, and consequently begin to shew themselves much sooner than the Rest?

I AM next to consider your *Seas*; *some* *Parts* give a *strong* and *vigorous Light*; and

and *others* appear more *faint* and *languid*. The *former*, you think must be *Land*; and the *latter*, *Sea*. But why so, I pray? May not the greater Brightness of the one, as well as the darker and weaker Light of the other; proceed from the more or less Disposition they may have to be *impregnated* and *exalted* by the *Light* of the SUN? Besides, are even all the *new Philosophers* themselves fully satisfied about these *Seas*? very far from it. One of the most eminent *Astronomers* of the last *Century*, makes no scruple to declare; *Marium vero similitudinem illic nullam reperio; In the Moon I can see nothing like Seas.* “ For, in
“ those vast Regions, continues he, which
“ appear so much *darker* than the rest,
“ and are therefore commonly called *Seas*;
“ in those very Places viewed with a longer *Telescope*, I find little round Cavities,
“ with Shadows falling in within them;
“ which can by no means agree with
“ the *Surface* of a *Sea*; and even those
“ large Plains, when more carefully view’d,
“ do not appear altogether even and smooth,
“ and therefore *they cannot be Seas.*” The same or the like Cavities, another learned

Member of the *Royal Academy of Sciences*, has since observed in all Parts of the MOON'S Face indifferently ; from which he in like manner concludes that, although some call the *brighter* Parts *Land*, and the *darker*, *Sea*, yet in effect there is nothing to be seen there that looks like a *watery Substance*. And as for that Observation which you seem to lay so much stress upon, I do not see wherein it contradicts any of these or what you can fairly infer from it ; except it be, that the Substance of the darker Parts, is, comparatively speaking, of a more *solid* and *uniform* Nature and Contexture, and consequently that it takes and imbibes the *Solar Vertue* more regularly than the rest.

HERE, LAURENTIUS, continued you, I could make a long *Digression*. For, if after all the *Attempts* and *Observations* that have been made to discover an *Atmosphere* about the Body of the MOON, it be certain at last, that she is encompassed with nothing but pure *Æther* ; if there be not only no *Demonstration*, but even no *probable Ground* to believe, there are any
Seas

Seas and Rivers in that *Planet* ; if the *Moderns* themselves are not only not certain, but even at open Variance with one another upon the Matter ; if even some Views, tho' taken by such Persons as wanted neither Ability nor Inclination to discover such *Seas and Rivers*, do yet clearly demonstrate there is no such thing there ; pray tell me ; what shall we think of all those grave *Philosophers* and *Divines* ; who, from such *imaginary Seas and Rivers*, argue likewise for *Rains* and *Dews* ; from them, for *Plants* and all other Necessaries of Life ; from these, for *various Animals* to live and feed upon them ; And lastly from the whole to conclude that, the *MOON* is in all Respects just such another *World*, and even peopled and inhabited like ours ! Would not any sober Person think that, the *old Religion* as well as the *old Philosophy* was in no small Danger of being quite banished from amongst us ! That *Moses* and the *Prophets* are as much out of their Favour as *Plato* and *Aristotle* !

BUT

BUT to return. There is one thing more, which I must beg leave to undeceive you in before I conclude. That the MOON has really a *Fund of Light* within herself ; and that her different *Phases* are occasioned, not by a *borrowed*, but by her own *native and proper Light*, *exalted and accended* by that of the SUN, you seem to think is only a *Notion*, a *mere Conjecture* of mine. But mistake me not, LAURENTIUS, I have not the Vanity to assume to myself the Honour of such a *Discovery*. I think, I am able to make it appear, not only that *many* of the *Antients* were of this *Opinion* ; but, which is much more considerable, That it is really more consonant to the *Philosophy* of the *Holy Scriptures* ; and to that astonishing *Power and Vertue*, which she is known to exercise over many kinds of *terrestrial Bodies*, than any other.

AND first, for *Antiquity*. I shall begin with *Philo's* Account of the *Nature* of the *celestial Bodies* : “ When GOD had resolved to create this *visible World*, says
“ he,

“ he, he first of all formed as it were in
“ his own Mind a *compleat Idea* of his
“ intended Work: This *Idea* we may call
“ the *intelligible World*; the creating
“ *Logos*; and the *Image* of GOD. After
“ the Pattern of the *intelligible World*, he
“ created first the *incoporeal World*, and
“ the *invisible Earth*, and the *Idea* of
“ *Air*, and of a *Void*; then the *incorpo-*
“ *real* Effence of *Water*, and of *Spirit*,
“ and of *Light*. And this *incoporeal*
“ *Light*, which is the *Image* of the *intelli-*
“ *gible Light*, is that *super-celestial Trea-*
“ *sure*; that *universal* and *never-failing*
“ *Fountain* of *pure Light*, from which
“ the SUN and MOON, and all the STARS
“ and PLANETS are constantly supplied
“ with all the Light which they severally
“ enjoy.” Here the SUN and MOON
and STARS and PLANETS are all put
upone one and the same Foot; they have
every one their own *peculiar Light*; they
all derive their several *Peculiars* from one
and the same *super-celestial* and *never-*
failing Fountain.

ACCOR-

ACCORDING to *Apuleius*, the *celestial* Bodies, the MOON and PLANETS, as well as the SUN and STARS, all derive their *Light* and *Vertues* respectively from the *quickenning Power* of GOD. “ The
 “ *Æther*, says he, and all those *celestial*
 “ *Fires* that adorn the same, are *accen-*
 “ *ded* by the *Vivacity* of the *immortal*
 “ GOD. Being placed above the *Regions*
 “ of *Mortality*, and *kindled* by this *di-*
 “ *vine original Fire*, they *burn* like so
 “ many *illustrious Torches*, and enlighten
 “ all things within their wide *Circumfe-*
 “ *rence*”. The *Robe*, wherein he makes
 ISIS to appear, he represents as adorned
 with *Stars* of great *Lustre*, and with the
 MOON in the midst of them, shining like
 the *purest Fire*. And where he describes
 the *seven Planets*, he expressly ascribes a
divine and *immortal Source of Fire*, to
 the great *Ruler of the Night*. “ Within
 “ the *Sphere* of the *fixed Stars*, says he,
 “ revolve *seven Bodies* illustrious for their
 “ *divine Powers* and *Vertues* ; first, *Sa-*
 “ *turn* ; then, *Jupiter* ; next, *Mars* ;
 “ then, *Mercury* ; next, *Venus* ; then, the
 SUN ;

Porch, Zeno ; all these, I say, together with all their numerous Train of *Followers*, unanimously taught and held the *MOON*, as well as the *SUN*, to be a Body partaking in some Measure of the Nature of *Fire* and *Light*. *Democritus* and *Anaxagoras* called her, *σπέρωμα διάπυρον*, *solidum Ignitum, sive accensum* ; *Diogenes*, *μοσνερείδες ἀναμμα*, *Fax pumiciformis ignita, sive accensa* ; *Io*, a Body *τῇ διαυγῇ, τῇ ἀφελγῇ*, *partim lucidum, partim obscurum* ; even *Epicurus* himself had the *Modesty* to confess that, the *Light*, which this *Planet* gives, may possibly be her own.

NAY, such is the Force of Truth, that I could name several *modern Authors* of great *Fame* and *Worth*, who have allowed as much as I need contend for. The learned *Gerard Vossius*, who has handled this Subject at large, concludes, as I remember, with these remarkable Words ; *Quare sic potius statuendum videtur habere quidem Lunam aliquid Lucis nativæ ac propriæ* ;
 “ That all things considered, it seems most
 “ reasonable to conclude, That the MOON
 “ has indeed some small Portion of Light,
 “ which

“ which may be *truly* and *properly* said to
“ to be her own.” The Incomparable
Mr. *Boyle*, though otherwise a professed
Admirer and Encourager of the *New Phi-*
losophy, was also of the same Opinion ;
For, in one of his last Pieces, he maintains
not only that the MOON, but even that eve-
ry *Planet* hath its *distinct Light* differing
from all the rest. “ We say, *they are his*
“ *own Words*, that every Planet hath its
“ own *proper Light* : And as the Light of
“ the SUN, is one thing, the Light of the
“ MOON another ; so every *Planet* hath
“ its *own distinct Light*, differing from all
“ the other.

THE same, I think, may be also fairly
concluded from sundry *late Experiments*.
Dr. Hooke made several *Tryals* with *refle-*
cting concave Glasses, which collected
great Quantities of the *lunar Rays* : And
he *concentred* them upon a *Thermoscope*,
which would be sensibly moved by a very
little Alteration of *Heat* or *Cold* ; but he
owns, he could not certainly perceive any
sensible *Variation*, though the little acci-
dental Changes of *Heat* or *Cold* in the

ambient Air, were very sensible by it. *Monf. Tschirnhaus*, made *convex Burning-Glasses* of that prodigious Force, as to turn Gold into a kind of fine purple-colour'd Glafs. By the same Glasses, he likewise *concentred* the *Rays* of the MOON. But tho' by this Means he could increase her Light to a great Degree, yet he owns he could never discover the least Increase of Heat. *Monf. de la Hire, the younger*, with a *Burning-Glass* of thirty five Inches *Diameter*, and the best *Thermometer* in the *Royal Observatory*, made another Experiment upon the Light of the MOON, at the *full*, and in the *Meridian*, and in a very *clear* Night; the Result whereof the still the same: For, tho' the *Rays* of the MOON were here *concentred* into less than the three hundredth Part of the space they naturally take up; and consequently had as much *Power* there, as three hundred *Full MOONS* would have in the ordinary Way, yet all this produced no Manner of Alteration in the *Thermometer*. Now, if all Light was of one and the same Kind or Nature; And, if the Light of the MOON was nothing but the
Reflexion

Reflexion of the SUN's Rays ; whence, I pray, should this surprizing Difference come, that with almost any *Burning-Glass* you may *concenter* the Rays of the SUN, so as to make them *increase* very considerably both in *Light* and *Heat* ; whereas *concenter* the Rays, and even encrease the *Light* of the *other* as much as possibly you can, and you shall not be able by any Way or Means to discover the least Increase of *Heat* at all ? Does not this evidently demonstrate, That the *Light* of the MOON is of a *different Nature* from that of the SUN, and consequently that it must be *really* and *truly* her own ?

I COME in the next Place, to shew more particularly, what Part the *Ancients* thought the SUN to have in this Affair. *Xenophanes*, and others, as *Gassendus* observes, held, that the Light of the MOON is a *Composition* or *Mixture* of the SUN's and her *own* Light together. The Author of the Book *De placitis Philosophorum*, takes notice that in his Time, several thought that the *different Phases* or *Appearances* of the MOON, were caused by
her

her Lights being *reciprocally accended* and *extinguished* after a certain *regular* and *due* Proportion. The Author of the Fragment, by some ascribed to *Censorinus*, says exprefsly, *Luna de sole flammatur* ; and elfewhere, *Luna creditur ignem a sole concipere, &c, quantum percutitur, ardescere*. The Prince of the *Roman Philosophers*, in feveral Places of his Works, discovers his Opinion as to this Matter, in very plain and explicate Terms : Nay, he mentions it not only as a *Philosophical Notion*, but which is more, he delivers it as a fort of a *divine* Discovery. For, among the many sublime and momentous Documents of *Philosophy* and *Morality*, which he makes the Great, the then happy *Africanus* reveal to his Grandfon, the young *Scipio*, the *Nature* and *Order* of the *celestial Bodies* is one ; and this among the reft, That the SUN is the *Captain* and *Prince* of all the *Planets*, and that the *Light of the MOON* is *accended* by his *Rays*. *Cleomedes* mentions three Opinions ; That of *Berosus* the *Babylonian*, who held the MOON to be ἡμιπυρρον σφαῖραν, *Spheram semi-ardentem* ; that is,

half-

half-luminous and *half-opake* ; that of *Thales* the *Milesian*, who is said to be the first that broached the Notion of the MOON'S Light being nothing, but the Beams of the SUN reflected back to us, without any kind of *Mixture* or other *Alteration* whatsoever ; and this I am now speaking of. And after a full Examination of the two first, he concludes, as I have done, that the Light which the MOON is observed to *acquire*, is nothing but her own native weaker Light *impregnated* and *accended* to that high Degree, by the *stronger* and more *masculine* Power of the SUN.

I MIGHT likewise add, That the several Names of the MOON in the *Hebrew*, in the *Greek*, and in the *Latin*, plainly shew that when they were first given, it was generally believed, that she was a Body endued with no inconsiderable Share of Light of her own. Thus the *Romans*, as *Tully* observes, called her *Luna*, *a lucendo* ; the *Greeks* σελαήνη, παρὰ τὸ σέλας ἢ νέον, *a novo lumine* ; or perhaps from σέλας, which, according to *Apuleius*, in the *Greek Language*, signifies

signifies *aeris incensi lucem*; the Jews, מאור and לבנה the former from אור *luxit*, and the latter from לבן *albus*. I might further observe from *Pausanias* and *Tully* among the *Ancients*; as well as from *Gyraldus*, *Ursinus*, *Beger*, *La Chaussée*, *Spanheim*, and other modern *Antiquaries*, that the *Greeks* and *Romans*, who worshipped this *Planet*, under the several Names of *Lucina*, *Diana*, *Hecate*, *Ceres*, and *Proserpine*, often represented those several Deities, with a *lighted Torch* in one Hand, and sometimes with one in each Hand; as it were on purpose to shew that she giveth her Light in the Manner I am contending for. But after what I have said already, I hope, I need not enlarge upon such Particulars.

As for the *Holy Scriptures*, continued you; I am perswaded you will hardly dispute the Point. The several Texts I have already quoted to prove her being *truly* and *properly* a great LUMINARY, as well as a Body of great *Power* and *Excellence*, evidently demonstrate she cannot be that *gross*, *opaque*, and *inactive* Body
you

you imagine. *Isaiah* and *Ezekiel* ; St. *Matthew* and St. *Mark*, (from the Mouth of JESUS CHRIST, the ETERNAL TRUTH,) plainly intimate that she is *really* a *luminous* Body ; and that in the last Agonies of Nature, *she shall cease to CAUSE her Light to shine upon the Earth*. St. *Paul* assures us that, *there is one Glory of the SUN ; another of the MOON ; and another of the STARS* ; which, I think, must be allowed to imply a different kind of Light in each. I cannot but again take Notice of the Account of *Jesus* the Son of *Sirach* ; the MOON, says he, *is the Beauty of Heaven, the Glory of the Stars, an Ornament giving Light in the highest Places of the LORD* : By Nature then she is not a *mere dark and gross Lump of common Matter* ; she cannot be wholly destitute of all *Light* of her own. She is $\sigma\kappa\epsilon\upsilon\theta\epsilon\iota$ παρεμβολῶν ἐν ὑψίστῃ an *Instrument, Vessel, or Organ of the Armies above* ; of the whole Host ; of all the *Powers* of Heaven ; of all that innumerable *Army* of *Stars* which encircle, and, as I may say, keep constant *Watch* and *Ward* over the

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whole visible Creation ; therefore, neither SHE nor THEY are mere *passive* and *inactive* Bodies, or wholly destitute of all *Communication* with one another : That would be utterly inconsistent, either with the *Use* of an *Army*, or with the *Office* of one appointed to minister between them and us. She is a LUMINARY that *decreaseth* ἐπὶ σωτέλειας, or as the *Alexandrian Manuscript* has it, ἐπὶ σωτελεία, *in consummationem in perfectionem* ; vel, *eo ut perficiatur*, in order to her being made *perfect* ; That is, she hastens to meet the SUN, in order to trim her Lamp afresh at his Beams ; In order to be *impregnated* with *new Power* and *Vertue*, and thereby fitted and enabled to perform all the several Functions of her succeeding Course ; or, as the late great *Restorer* of the ancient *Hieroglyphic Learning* expresses it, *ut fœtu & vivica virtute repleatur*. Lastly, She *increaseth wonderfully in her changing*. *Wonderfully !* as how ? The Word which we translate *changing*, in the *Original* is, ἀλλοίωσις ; which *Aristotle* defines to be κίνησις κατὰ τὸ ποῖον ; In which
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Sense a thing is only changed, when an *Alteration* is made in the *Qualities*, *Affections*, or *Passions* thereof. The *Wonder* therefore, as I take it, does not lie barely in her *increasing in Light*, or in her *changing Appearances* so often as she does; but more especially in this, That all along as she increaseth in Light, many different and various Changes and Alterations are incessantly wrought and produced in the *Qualities* and *Constitution* of her Nature. And this is truly wonderful. If you ask, by what *Agents* such *Changes* and *Alterations* are wrought? I answer by the SUN, and by those ARMIES above, whose Instrument she is; by whose several Influences it is more than probable, she may be *impregnated* every Moment with many *new* and *surprising Vertues*. But this is not a Time to enquire how and by what Means all the Changes she may be liable to, are produced. It is sufficient to observe that, she is here represented as a LUMINARY of great *Power* and *Vertue*, and as a Body subject to continual *Changes* and *Alterations*; and consequently that

among many others, which the SUN may be the Cause of, This of *altering, exalting, and accending* her weaker Light by his more powerful Influence, in all Probability is none of the least considerable.

I COME now in the last Place, continued you, to give you some Instances of the *Power and Influence* of this mighty Planet in the natural World. *Pliny* and *Dioscorides* describe a sort of precious Stone, called a *Selenite*, which in the Night-time exhibits the *Image* of the MOON, and *increases and decreases* as she does. *Severus* a noble Roman, as *Photius* relates, saw a Stone at *Alexandria*, wherein was divers *Figures* of the MOON, sometimes *increasing* and sometimes *decreasing* according to the SUN; and that therein also was to be seen the *Figure* of the SUN; for which Reason they called such Stones, *Lapides Synoditæ*. The same Person also, says the same *Author*, saw another Stone there, which being put into Water, exhibited a little MOON, and turned about of itself according to the

Motions

Motions of that Planet ; which therefore, they called an *Aqui-lunar Stone*. Kircher says there there is in *China* a *Stone* of inestimable Price, which *increases* and *decreases* with the MOON. Mizaldus informs us, That he saw a *Stone* himself in the Hands of a curious and intimate Friend, about the Shape and Size of an Onion, and black and smooth like hard Pitch ; In which there was a *whitish Spot*, which *increased* and *decreased* every Day as the MOON did. This, he suspected at first to be a Work of Art, and therefore prevailed with his Friend to lend him the Stone for a Month, to examine it more nicely. The Result whereof was, that he was convinced it was the Work of Nature ; that at every *Conjunction*, the *Spot* was but just to be seen at the *Edge* of the *Stone* ; that it *moved* and *increased* as the MOON did ; until it came to the *Center* of the *Stone*, where it exactly represented the full MOON ; and that afterwards it gradually *decreased* with the MOON, and returned the same Way it came to the *Edge* of the *Stone* again. And thus it continued moving

ving *backwards* and *forwards*, *increasing* and *decreasing* and had never been observed to fail. Such another *Stone*, *Cardan* tells us, *Pope Clement VII.* had, with a *Golden Spot* in it, which, in Imitation of the *SUN*, moved quited round it once a Day.

W O N D E R F U L *Phænomena* ! too wonderful, peradventure you'll say, to be believed. But what shall we say then to many other Instances of the *Power* of this Planet over many Sorts of things ; for the Credibility whereof we have the Suffrage and Authority even of some of the *new Philosophers* themselves ? The excellent *Mr. Boyle*, in one of his Treatises tells us, they have a received Tradition in *Java*, that the Beams of the *M O O N* are wont to cause *Contractures* in the Bodies of those that stay too long exposed to them ; and that the Truth thereof was confirmed to him by an ingenious Doctor, that with Applause practised *Physick* in those Parts ; who assured him, he had observed, that by that Means only, some were made lame ;
or

or else had some of their Limbs contracted for divers Weeks, and some for many Months, or even a longer Time; and that himself in particular, soon after his Arrival in those Parts, having one Night laid himself down very slenderly covered to sleep, in a Place upon which the MOON could fully beat for a good Part of the Night; when he went to rise, found his Neck so stiff, that he was scarce able at all to stir it, and his Mouth so drawn awry, that it was hideous to behold; which continued upon him for some Days, until by the Use of brisk *Aromatic* Medicines, he got off a Contracture, which used to stay very much longer with others.

THE same curious Gentleman, in another of his Treatises, tells us that he knew an intelligent Person that, having by a very dangerous Fall, so broken his Head, that divers large Pieces of his Skull were taken out; for divers Months that he lay under the Surgeon's Hands, constantly observed that about the full MOON, there would be extraordinary Prickings and Shootings
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in the wounded Parts of his Head, as if the *Meninges* were stretched or pressed against the rugged Parts of the broken Scull, and this with so much Pain, as would for two or three Nights hinder his Sleep, of which at all other times of the M O O N he used to enjoy a Competency. And that the Gentleman further added, that the Surgeons observed from Month to Month, as well as himself, the Operation of the *full* M O O N upon his Head, informing him that they then manifestly perceived an *Expansion* or *Intumescence* of his *Brain*, which appeared not at all at the *new* M O O N ; nor was he then obnoxious to the forementioned pricking Pains.

IN another short Discourse at the End of the same Treatise, the same *noble* Author, among fundry other curious Observations on various Subjects, tells us that, having asked an inquisitive Traveller, who had waited on a *German Prince* addicted to *Chymistry*, and was imployed by him in his private *Laboratory*, some Questions
in

about Ore of *Bismute* or *Tin-Glass*, and in particular whether he had observed any thing of the varying Bulk of a strange Liquor obtainable from it ; the Gentleman answered him to this Effect ; that he had Occasion to make many Tryals upon that *Mineral* and that particularly by his Prince's Command, he had distilled a considerable Quantity of a certain Sort of it ; and that he thereby obtained a Liquor, which being by Rectification freed from its superfluous Flegm, amounted to about half a Pint. That this Liquor was put into a Viol, which it almost half filled ; and that the Viol being exactly stopped, was set aside in a quiet Place ; where, according to the Prince's Expectation, *as the Light of the MOON increased from the New MOON towards the Full, so this Liquor gradually swelled, and that not in a hardly perceptible Degree, but very manifestly and considerably ; so that when the MOON was at the full, the Liquor reached almost to the Top of the Glass ; and during her Wane, as the Light decreased, so did the Bulk of the Liquor,*

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which was always least at the New Moon.

A PHYSICIAN, you know, at this time in great *Reputation* and *Esteem*, has obliged the World with a *learned Treatise* to demonstrate the *Power* and *Dominion* of the SUN and MOON over *humane Bodies*; in which, among many other Instances, he tells us, from *Bartolin*, of an *Epileptic Girl*, that had *Spots* in her Face, that changed both in *Colour* and *Magnitude* with the MOON; from *C. Piso* of a *Noble Woman*, whose left Cheek, together with a Part of her Neck, swelled to a manifest *Tumor* about every *New Moon*; from *Kerkringius*, of a certain *French Matron*, whose Face at the Time of every *Full Moon*, was well shaped and indeed very beautiful; but that as she *decreased*, her Eyes, Nose, and Mouth, were drawn of one Side, so that she was ashamed to be seen abroad, till the Increase of the MOON again, when she gradually recovered her natural Shape and Beauty; from the *Philosophical Transactions*, of several *Periodical*

cal Evacuations of *Blood*, and some at very unusual Parts of the Body, as a *Thumb*, a *Finger*; all exactly following, and therefore most probably caused by the *Course* and *Influence* of the *MOON*; From *his own Knowledge*, of a *Boy*, whose Fits always returned at *high Water*, and went off again at *low Water*; and that so regularly, that his Father, who was a *Lighterman*, and lived near the *Thames side*, could at any Time a-bed, from the Condition of his Son, tell how the Tide was, and order his Affairs accordingly.

IN a Word, LAURENTIUS, what shall we say to a *thousand* unquestionable Instances that might be given of the *Power* and *Influence* of this *mighty Planet* over the *Waters* of many *Oceans*; over the *Fluids* of many *living Creatures*; over the *Properties* and *Qualities* of many *Plants* and *Vegetables*; over the *Seasons* of the *Year*, the *Fertility* of the *Earth*, the *Temperature* of the *Air*; and in short, over the *Passions*, and even over the *Sense* and *Reason* of many Persons *epileptical*,

Paralytical, Hysterical, Maniacal? Do not all these things irrefragably demonstrate, that the *Power and Influence* of this glorious LUMINARY, is *very great, very extensive, very surprising?* Can you give us any Instances of the like *Power of Saturn, or Jupiter, or Mars, or Venus, or Mercury, or of any of the rest of the Stars?* Will *mere Matter* and any *Law of Attraction* whatsoever, ever possibly account for such *various* and *surprising Phenomena?* Surely, nothing but some *very untoward Influence* of that very LUMINARY you would thus debase, could ever tempt Men of Parts to harbour such a *Conceit*.

By this Time it beginning to grow late, and one of the Company making a Motion for going; LAURENTIUS rose up at the same time somewhat hastily; recollecting, as he said, that he had invited some Friends to sup with him that Night at his own House; then addressing himself to you, THEOPHANES, said he, I am infinitely obliged to you for this Night's Entertain-

ment;

ment ; you may depend upon it I shall carefully consider what you have said ; But for the present we must adjourn the Debate. Then, after a short Apology to the Company for leaving them so abruptly, you waited on him to his Coach.

WHEN you came in again, I made a Motion for going too. TIMANTHES, said you, I hope you are in no Haste. In Haste ! answered I, no, THEOPHANES, believe me, I am in no Haste : The Truth is, I am so pleased with your *Philosophy* that, I know not how to leave you. The GODDESS which the *Poets* feigned to avoid all Confort and Acquaintance with Men, has surely changed her Mind : She only betook herself to the *Woods* and *Groves*, until she could find out a Person that could treat and entertain her as you have done. Her Modesty made her fly from those who would give her more Honour than was her due ; and yet so conscious is she of her own real Worth that she will not be approached by every *Woer*. This, I presume, you was aware of ; and therefore,
like

like a Man of true Breeding, you have taken Care to treat her in a Manner suitable to her Quality.

BUT above all, THEOPHANES, O ! how agreeably am I surpris'd, to meet with such an *Advocate* for the *Holy Scriptures*, at a Time when so many *Pretenders* to *Wit* and *Learning*, and even some of the *Sacred Order itself*, think themselves better *Philosophers* than *Moses*, or any of the *Holy Writers*. O ! my *beloved Friend*, had THEAGENES been alive and here this Night, how would he have been pleas'd with your Discourse !

THE old Gentleman I remember very well, replied you ; my Father always express'd a great Esteem for him. But why, I pray, would he have been so particularly pleas'd with any thing that I have said ?

THEAGENES, answer'd I, was my Neighbour in the Country for many Years : He was a Person endued with many excellent good Qualities ; he perfectly understood

stood the *learned Languages*; he had applied himself with great *Affiduity* to the *Study of the Ancients*; he was thoroughly versed in all the *modern Schemes* and *Systems of Philosophy*; but what made up the brightest Part of his *Character* was, that he could never endure to hear the *Authority of the Scriptures* called in *Question* upon any *Account*. To tell you the *Truth*, I was once as fond of the *modern Philosophy*, and of every thing called a *new Discovery*, as your Friend LAURENTIUS. I *read* them; I *liked* them; I *believed* them. And when the *Authority of the Holy Scriptures* was at any Time alledged against me, I answered much after the same Manner he did to Night. But after I came to be better acquainted with THEAGENES, he so plainly demonstrated to me the *Insufficiency* and *exceeding Precariousness* of all the *modern Systems* and *Principles of Philosophy*, on the one Hand, and the *Reverence* and *high Veneration*, which is due to the *Scriptures*, as the *Word of GOD* on the other; that, I learned of him

him to entertain more awful and becoming Thoughts of those *Divine Writings* than I had done before. Judge then, THEOPHANES, if I have not Reason for what I said.

How! TIMANTHES, answered you; if that be the Case, why have you sat so silent all this Night, when you heard the *Authority* of the *Scriptures* so warmly attacked? why, said I, I found you managed matters so well your self, that I thought you did not want a *Second*. Tell me truly then, said you, was you really such an *Admirer* of the *new Philosophy* as you say? I was indeed. And did THEAGENES work such Wonders upon you? He did. O! TIMANTHES, said you, That's more, I doubt, than LAURENTIUS, will say by me the next Time we meet.

BE not discouraged, said I, nor think it strange, if your *Arguments* should not at first have all the Weight they deserve. It may be LAURENTIUS knows little or
nothing

nothing of any *other* Philosophy but the *new* : And if so ; you must expect to find it very difficult to put him out of Conceit with it. Believe me, THEOPHANES, it was once my own Case. For the Success that THEAGENES had with me, was not the Work of a *Day*, nor of a *Month* ; and much less of an *Hour* or *two's* Conversation.

YOU would greatly oblige me then, said you, if you would give your self the Trouble to tell me, how and by what Means THEAGENES could bring you to such a Temper. For, by that Means I persuade myself, I should be much better able to deal with my Friend, if he should chance to renew the Debate another time.

TO divert you from this, I made use of all the Arguments I could think of ; but all that I could say made not the least Impression on you. You insisted upon it, That if I had really that *Veneration* for the *Scriptures*, I said I had, I could have no good Reason for declining so just a Re-

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quest ; and that whatever Excuse I might pretend for not opening my Mouth all the time that LAURENTIUS was there ; yet I could have no Reason for not contributing all that lay in my Power to enable you to maintain your Ground, in case he should come better prepared another time. In a Word, the most that I could obtain, was to put the Matter off for that Night ; upon Condition that I would set apart the first spare Time I had to write down the Substance of what had passed at many *different Times* between THEAGENES and myself ; which therefore, for your Satisfaction, here follows ; and is intirely submitted to you, to make what Use of it you please ; provided you will only pardon my introducing it, as you see I have done with so *imperfect* an Account of that *Conversation* which gave the first occasion to it.

F I N I S.

ERRATA.

PAGE 2. Line 1 and 2, for *lively Impression*, r. *lively an
Impression*. P. 28. l. 24. for *imflammable*, r. *inflamable*.
P. 52. l. 17. for *the still*, r. *was still*. P. 55. l. 24. for *σελῶνῃ*
r. *σελῶνῃ*.

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